ABSTRACT

A method of improving the resistance of collagenous tissue to mechanical degradation in accordance with the present invention comprises the step of contacting at least a portion of a collagenous tissue with an effective amount of a crosslinking reagent. Methods and devices for enhancing the body's own efforts to stabilize discs in scoliotic spines by increasing collagen crosslinks. This stability enhancement is caused by reducing the bending hysteresis and increasing the bending stiffness of scoliotic spines, by injecting non-toxic crosslinking reagents into the convex side of discs involved in the scoliotic curve. Alternatively, contact between the tissue and the crosslinking reagent is effected by placement of a time-release delivery system directly into or onto the target tissue. Methods and devices that use crosslinking agents for increasing the permeability of an intervertebral disc, improving fluid flux to the intervertebral disc, and increasing the biological viability of cells within the intervertebral disc are provided.